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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/138,146	08/21/1998	MATTHEW BRETT BAILLIE	2-2	3730

7590 03/12/2002

DOCKET ADMINISTRATOR (ROOM 3C-512)
LUCENT TECHNOLOGIES INC
600 MOUNTAIN AVENUE
PO BOX 636
MURRAY HILL, NJ 079740636

EXAMINER

CLARK, SHEILA V

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 03/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/138,146

Applicant(s)
Baillie et al

Examiner
Sheila V. Clark

Art Unit
2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 24, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above, claim(s) 8-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit: 2815

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 7, 21, 23, 24, 25, 27, 28 are rejected under 35 U.S.C. 102 (b) as being anticipated by MC Shane et al.

McShane et al shows a carrier having a base 40. An inner and outer wells formed by through holes 34 are shown formed about the periphery of the base. The inner well has an outer wall coupled to the inner wall of the outer well. And a chip 52 is shown positioned on the base and is deemed to be removable by removing means well know in the art. The wells of McShane are shown to have an upper surface and the distance features recited in claim 4. Figure 1 shows said through hole wells to encircle the base.

Said wells are shown to be distinct and separate and therefore discontinuous.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over McShane et al.

Art Unit: 2815

McShane discloses that the wells may be formed of dielectric and metal materials and the lack of a description of particular materials is deemed to suggest use of conventional materials. Conventional materials well known in this technology used in circuit board structures would include such materials as polyimides and flexible metals such as copper and aluminum. Metal and substrate thickness would also determine the level of flexibility of said structure. As the claim provides no specifics that characterize flexible it is deemed that McShane teaches obvious use of flexible materials for the reasons mentioned above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 6 and 7 rejected under 35 U.S.C. 102(b) as being anticipated by Budde.

Budde shows a base 5. An inner and outer wells 11 are shown formed about the periphery of the base. The inner well has an outer wall coupled to the inner wall of the outer well. And a chip 3 is shown positioned on the base. Said wells are shown to be formed of a continuous material of metal and said wells are also shown to be distinct and separate and therefore discontinuous.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 2815

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Budde.

Budde discloses that the wells may be formed of metal materials (i.e. copper and aluminum) that have flexible characteristics shown by the bendability of the bended structure. Metal and substrate thickness would also determine the level of flexibility of said structure. As the claim provides no specifics that characterize flexible it is deemed that Budde teaches obvious use of flexible materials for the reasons mentioned above.

Claims 22, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McShane et al.

The teaching of McShane relative the features of the claims from which claims 22 and 26 depend have been addressed above except for the carrier teaching relative to a plurality of devices are deemed to be applicable to a plurality of carrier devices. The package teachings of McShane though performed using a single package as an example does not limit said teachings to a single IC carrier style or package orientation. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of integrated circuit carriers. The ordinary artisan would have motivated to modify prior the carrier of McShane because carrier devices are often created as a plurality of carriers and then may be cut into single or plural structures and the teachings of McShane are performed using a single carrier as an example but may be applied to single or plural groupings as design modification dictate.

Application/Control Number: 09/138,146

Page 5

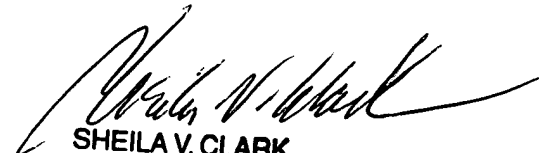
Art Unit: 2815

Claims 1-7 and 21-28 are rejected.

The claims in the RCE application are the same as those addressed in the last office action so the rejection as been repeated.

Any inquiry concerning this communication should be directed to Examiner S.V. Clark at telephone number (703) 308-4924.

March 7, 2002



SHEILA V. CLARK
PRIMARY EXAMINER